4. BAIT SHYNESS AND POISON AVERSION IN *BANDICOTA BENGALENSIS* (GRAY) USING RH-787 AS RODENTICIDE

Introduction

Studies have been made on behavioural aspects of poison aversion and bait shyness in *Rattus rattus* (Barnett *et al.* 1975), *Tatera indica, Meriones hurrianae* (Prakash and Jain 1971) and *Gerbillus gleadowi* (Rana *et al.* 1975). In the present experiments, studies have been made on bait shyness and poison aversion in *Bandicota bengalensis* (Gray) when subjected to sub-lethal dose of RH—787 (N-3-Pyridylmethyl-N-P-Nitrophenylurea)[1]. Acceptability of RH-787 to *B. bengalensis* in laboratory conditions has already been studied (Sood and Dilber 1977).

Material and Metods

Ten individuals of *B. bengalensis* were kept segregated in laboratory cages for 15 days to acclimatise them. Each individual was daily provided with sorghum (*Sorghum vulgare*) and millet (*Pennisetum typhoides*) grains. Water was supplied *ad-libitum*. For the first three days, total daily intake (TDI) of each food item was measured. For the subsequent four days, 0.025 per cent of RH-787 (Vacor) and one per cent mustard oil were mixed with the preferred food material, and the TDI of both the food materials were recorded. Thereafter, rats were fed on wheat (*Triticum aestivum*) grains. They were then exposed to the preferred food mixed with one per cent mustard oil and simple sorghum grains for 24 hours after 7th and 15th days from initial exposure to the sub-lethal dose of RH-787 and TDI of both the food materials was recorded.

Results and Discussion

B. bengalensis preferred millet over sorghum during the first three days. The TDI of millet was significantly more than that of sorghum ($t = 7.08$ $P < .005$). On the subsequent four days, less millet was consumed to which 0.025 per cent RH-787 and one per cent mustard oil were mixed (Table 1). The difference in TDI of plain millet prior to the exposure to sub-lethal dose of RH-787 and of millet grains mixed with RH-787 and mustard oil is significant ($t = 3.64$ $P < .01$). There is no significant difference in TDI of plain sorghum consumed on subsequent four days when millet was mixed with RH-787 and mustard oil.

Table 1

Mean daily intake (g/100 g body wt.) of sorghum and millet by *B. bengalensis* (Gray)

Food	1st day	2nd day	3rd day	4th day	5th day	6th day	7th day
Millet	10.1±1.01	11.66±1.07	9.71±1.46	6.46±1.02	1.56±0.95	2.95±1.22	4.5±1.52
Sorghum	4.96±1.61	5.9±0.98	1.45±0.57	2.16±0.71	1.19±0.40	1.72±0.61	2.39±0.60

On the 10th day, rats were provided with plain sorghum and millet mixed with mustard oil. TDI of millet was less than that of the initial three days of the experiment. On the 15th day, the consumption of both the food materials surpassed the initial level similar to that reported in *Gerbillus gleadowi* using sub-lethal dose of zinc phosphide (Rana *et al.*

1975). Thus, sickness developed due to feeding on sub-lethal dose of Vacor lasts for 7-15 days only. This implies that the poisoned bait is liable to be rejected by the rats if, it is provided before the completion of 15 days from the previous poison baiting. Hence the poison baiting for control in *B. bengalensis* should not be repeated before 15th day of previous poison baiting, using RH-787 as a rodenticide. However, more studies of the type as also the field trials need to be done before recommendations.

Present studies also reveal that 30% rats on 2nd and 3rd days of exposure and 10% rats on 4th day of exposure did not feed on poisoned millet.

When a second group of ten individuals of *B. bengalensis* was provided with plain sorghum and millet grains mixed with one per cent mustard oil for four days, there was no decline in the consumption of millet. Thus shyness can be ascribed to poison not mustard oil.

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5. ON THE UNUSUAL OCCURRENCE OF THE COMMON DOLPHIN, *DELPHINUS DELPHIS* LINNAEUS IN LONGLINE CATCHES AT PORT BLAIR, ANDAMANS

The Exploratory Fishing Vessel, *Meenaprayas,* conducting longline tuna fishing off Port Blair, Andamans, had an unusual catch of the Common Dolphin, *Delphinus delphis* Linnaeus, on 30-3-1979. The black-skinned dolphin measuring 202 cm, weighed 68 kgs. The animal was dead when hauled on deck. It was not actually hooked in the mouth, but had fouled in the branch line of the longline gear.